

WTIO30 FMEE 190046

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 17/6/20232024

1.A INTENSE TROPICAL CYCLONE 6 (DOUNGOU)

2.A POSITION 2024/02/19 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 23.2 S / 83.0 E

(TWENTY THREE DECIMAL TWO DEGREES SOUTH AND  
EIGHTY THREE DECIMAL ZERO DEGREES EAST)

MOVEMENT: SOUTH-EAST 28 KT

3.A DVORAK ANALYSIS: 5.0/6.0/W 1.0/6 H

4.A CENTRAL PRESSURE: 943 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 100 KT

RADIUS OF MAXIMUM WINDS (RMW): 46 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):

28 KT NE: 500 SE: 465 SW: 390 NW: 350

34 KT NE: 295 SE: 260 SW: 240 NW: 205

48 KT NE: 185 SE: 165 SW: 160 NW: 130

64 KT NE: 120 SE: 110 SW: 110 NW: 95

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1300 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/02/19 12 UTC: 26.8 S / 88.4 E, VENT MAX= 075 KT, TROPICAL CYCLONE

28 KT NE: 510 SE: 325 SW: 380 NW: 260

34 KT NE: 280 SE: 185 SW: 175 NW: 140

48 KT NE: 130 SE: 120 SW: 110 NW: 75

64 KT NE: 85 SE: 55 SW: 55 NW: 65

24H: 2024/02/20 00 UTC: 29.5 S / 94.6 E, VENT MAX= 055 KT, POST-TROPICAL  
DEPRESSION

28 KT NE: 465 SE: 270 SW: 325 NW: 335

34 KT NE: 250 SE: 155 SW: 195 NW: 175

48 KT NE: 100 SE: 95 SW: 75 NW: 55

36H: 2024/02/20 12 UTC: 30.8 S / 101.1 E, VENT MAX= 040 KT, POST-TROPICAL  
DEPRESSION

28 KT NE: 285 SE: 260 SW: 345 NW: 295

34 KT NE: 130 SE: 150 SW: 120 NW: 155

48H: 2024/02/21 00 UTC: 30.7 S / 105.3 E, VENT MAX= 030 KT, FILLING UP

28 KT NE: 205 SE: 220 SW: 195 NW: 120

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=5.0- CI=6.0-

OVER THE LAST 6 HOURS, DJOUNGOU'S EYE PATTERN IN INFRARED IMAGERY HAS DETERIORATED SIGNIFICANTLY AND FINALLY DISAPPEARED FROM 20UTC, WITH AN INCREASINGLY ASYMMETRICAL CLOUD MASS DUE TO WIND SHEAR, DESPITE STILL INTENSE CONVECTION NEAR THE CENTER. THE IMPACT OF SHEAR IS ALSO VISIBLE ON MICROWAVE IMAGES AMSR2 1945Z AND SSMIS-F18 2227Z, SHOWING INCREASING EROSION OF THE NORTHERN EYEWALL AND A BROADER INNER CORE. THE INTENSITY IS THUS LOWERED TO 100KT, TAKING INTO ACCOUNT THE SYSTEM'S INERTIA AND THE LOWER INTENSITY GIVEN BY AVAILABLE OBJECTIVE ESTIMATES.

DJOUNGOU WILL KEEP ITS FAST SOUTHEASTWARD MOVEMENT THIS MONDAY, CHanneled BETWEEN A RIDGE TO THE EAST-NORTHEAST AND A TROUGH TO THE SOUTH. ITS MOVEMENT SHOULD SLOW DOWN FROM TUESDAY AS IT WEAKENS. THE PRESENT FORECAST HAS IT LEAVE THE SOUTH-WEST INDIAN OCEAN BASIN AND ENTER THE AUSTRALIAN AREA OF RESPONSIBILITY THIS MONDAY EVENING BEFORE 18UTC.

ENVIRONMENTAL CONDITIONS ARE GETTING WORSE DUE TO DECREASING OCEANIC HEAT CONTENT AND STRENGTHENING NORTH-WESTERLY WIND SHEAR FAVOURING DRY AIR INTRUSIONS FROM THE WEST AND NORTH. THE SYSTEM SHOULD BECOME POST-TROPICAL THIS MONDAY EVENING BEFORE BECOMING A REMNANT LOW BY MID-WEEK.

THIS SYSTEM DOES NOT POSE ANY THREAT TO INHABITED LANDS.